SIEMENS

Data sheet

6ES7323-1BH01-0AA0



SIMATIC S7-300, Digital module SM 323, isolated, 8DI and 8DO, 24 V DC, 0.5 A Total current 2A, 1x 20-pole

Figure similar

Supply voltage		
Load voltage L+		
 Rated value (DC) 	24 V	
 permissible range, lower limit (DC) 	20.4 V	
 permissible range, upper limit (DC) 	28.8 V	
Input current		
from load voltage L+ (without load), max.	40 mA	
from backplane bus 5 V DC, max.	40 mA	
Power loss		
Power loss, typ.	3.5 W	
Digital inputs		
Number of digital inputs	8	
Input characteristic curve in accordance with IEC 61131, type 1	Yes	
Number of simultaneously controllable inputs		
horizontal installation		
— up to 60 °C, max.	8	
vertical installation		
— up to 40 °C, max.	8	
Input voltage		
 Type of input voltage 	DC	
Rated value (DC)	24 V	
• for signal "0"	-30 to +5 V	
● for signal "1"	13 to 30V	
Input current		
● for signal "1", typ.	7 mA	
Input delay (for rated value of input voltage)		
for standard inputs		
— at "0" to "1", min.	1.2 ms	
— at "0" to "1", max.	4.8 ms	
— at "1" to "0", min.	1.2 ms	
— at "1" to "0", max.	4.8 ms	
Cable length		
• shielded, max.	1 000 m	
• unshielded, max.	600 m	
Digital outputs		
Number of digital outputs	8	
Short-circuit protection	Yes	
Response threshold, typ.	1 A	
Limitation of inductive shutdown voltage to	L+ (-53 V)	

	· · ·
Controlling a digital input	Yes
Switching capacity of the outputs	
• on lamp load, max.	5 W
Load resistance range	
• lower limit	48 Ω
upper limit	4 kΩ
Output voltage	
• for signal "1", min.	L+ (-0.8 V)
Output current	
● for signal "1" rated value	0.5 A
• for signal "1" permissible range, min.	5 mA
• for signal "1" permissible range, max.	0.6 A
for signal "1" minimum load current	5 mA
 for signal "0" residual current, max. 	0.5 mA
Output delay with resistive load	
• "0" to "1", max.	100 μs
• "1" to "0", max.	500 μs
Parallel switching of two outputs	ουσ μο
• for uprating	No
for redundant control of a load	Yes; only outputs of the same group
	res, only outputs of the same group
Switching frequency	400 11-
with resistive load, max.	100 Hz
with inductive load, max.	0.5 Hz
 with inductive load (acc. to IEC 60947-5-1, DC13), max. 	0.5 Hz
on lamp load, max.	10 Hz
Total current of the outputs (per group)	
horizontal installation	
— up to 40 °C, max.	4 A
— up to 60 °C, max.	4 A
vertical installation	
— up to 40 °C, max.	4 A
Cable length	
shielded, max.	1 000 m
shielded, max.unshielded, max.	1 000 m 600 m
• unshielded, max.	
• unshielded, max. Encoder	
unshielded, max. Encoder Connectable encoders 2-wire sensor	600 m Yes
unshielded, max. Encoder Connectable encoders 2-wire sensor permissible quiescent current (2-wire sensor), max.	600 m
unshielded, max. Encoder Connectable encoders 2-wire sensor permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information	Yes 2 mA
unshielded, max. Encoder Connectable encoders 2-wire sensor permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms	Yes 2 mA
unshielded, max. Encoder Connectable encoders 2-wire sensor permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function	Yes 2 mA
unshielded, max. Encoder Connectable encoders 2-wire sensor permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indication LED	Yes 2 mA No No
unshielded, max. Encoder Connectable encoders 2-wire sensor permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indication LED Status indicator digital input (green)	Yes 2 mA No No Yes
unshielded, max. Encoder Connectable encoders 2-wire sensor permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indication LED Status indicator digital input (green) Status indicator digital output (green)	Yes 2 mA No No
unshielded, max. Encoder Connectable encoders 2-wire sensor permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indication LED Status indicator digital input (green) Status indicator digital output (green) Potential separation	Yes 2 mA No No Yes
unshielded, max. Encoder Connectable encoders 2-wire sensor permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indication LED Status indicator digital input (green) Status indicator digital output (green) Potential separation Potential separation digital inputs	Yes 2 mA No No Yes Yes Yes
unshielded, max. Encoder Connectable encoders 2-wire sensor permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indication LED Status indicator digital input (green) Status indicator digital output (green) Potential separation Potential separation digital inputs between the channels	Yes 2 mA No No Yes Yes
unshielded, max. Encoder Connectable encoders 2-wire sensor permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indication LED Status indicator digital input (green) Status indicator digital output (green) Potential separation Potential separation digital inputs between the channels between the channels, in groups of	Yes 2 mA No No Yes Yes Yes Yes
unshielded, max. Encoder Connectable encoders 2-wire sensor permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indication LED Status indicator digital input (green) Status indicator digital output (green) Potential separation Potential separation digital inputs between the channels between the channels, in groups of between the channels and backplane bus	Yes 2 mA No No Yes Yes
unshielded, max. Encoder Connectable encoders 2-wire sensor permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indication LED Status indicator digital input (green) Status indicator digital output (green) Potential separation Potential separation digital inputs between the channels between the channels and backplane bus Potential separation digital outputs	Yes 2 mA No No Yes Yes Yes Yes Yes 8 Yes; Optocoupler
unshielded, max. Encoder Connectable encoders 2-wire sensor permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indication LED Status indicator digital input (green) Status indicator digital output (green) Potential separation Potential separation digital inputs between the channels between the channels and backplane bus Potential separation digital outputs between the channels and backplane bus Potential separation digital outputs between the channels	Yes 2 mA No No Yes Yes Yes Yes Yes Yes 8 Yes; Optocoupler
unshielded, max. Encoder Connectable encoders 2-wire sensor permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indication LED Status indicator digital input (green) Status indicator digital output (green) Potential separation Potential separation digital inputs between the channels between the channels and backplane bus Potential separation digital outputs	Yes 2 mA No No Yes Yes Yes Yes Yes 8 Yes; Optocoupler
unshielded, max. Encoder Connectable encoders 2-wire sensor permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indication LED Status indicator digital input (green) Status indicator digital output (green) Potential separation Potential separation digital inputs between the channels between the channels and backplane bus Potential separation digital outputs between the channels and backplane bus Potential separation digital outputs between the channels	Yes 2 mA No No Yes Yes Yes Yes Yes Yes Yes No No Yes
unshielded, max. Encoder Connectable encoders 2-wire sensor — permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indication LED • Status indicator digital input (green) • Status indicator digital output (green) Potential separation Potential separation digital inputs • between the channels • between the channels and backplane bus Potential separation digital outputs • between the channels • between the channels, in groups of	Yes 2 mA No No Yes Yes Yes Yes 8 Yes; Optocoupler Yes 8
unshielded, max. Encoder Connectable encoders 2-wire sensor — permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indication LED Status indicator digital input (green) Status indicator digital output (green) Potential separation Potential separation digital inputs between the channels between the channels and backplane bus Potential separation digital outputs between the channels between the channels and backplane bus Potential separation digital outputs between the channels between the channels between the channels between the channels between the channels and backplane bus	Yes 2 mA No No Yes Yes Yes Yes 8 Yes; Optocoupler Yes 8
unshielded, max. Encoder Connectable encoders 2-wire sensor — permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indication LED • Status indicator digital input (green) • Status indicator digital output (green) Potential separation Potential separation digital inputs • between the channels • between the channels and backplane bus Potential separation digital outputs • between the channels • between the channels and backplane bus Isolation	Yes 2 mA No No Yes Yes Yes Yes Yes 8 Yes; Optocoupler Yes 8 Yes; Optocoupler
unshielded, max. Encoder Connectable encoders 2-wire sensor — permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indication LED Status indicator digital input (green) Status indicator digital output (green) Potential separation Potential separation digital inputs between the channels between the channels and backplane bus Potential separation digital outputs between the channels between the channels and backplane bus Potential separation digital outputs between the channels between the channels between the channels and backplane bus Isolation Isolation tested with	Yes 2 mA No No Yes Yes Yes Yes Yes 8 Yes; Optocoupler Yes 8 Yes; Optocoupler
unshielded, max. Encoder Connectable encoders 2-wire sensor — permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indication LED Status indicator digital input (green) Status indicator digital output (green) Potential separation Potential separation digital inputs between the channels between the channels and backplane bus Potential separation digital outputs between the channels between the channels and backplane bus Potential separation digital outputs between the channels between the channels and backplane bus Isolation Isolation tested with connection method	Yes 2 mA No No No Yes Yes Yes Yes 8 Yes; Optocoupler Yes 8 Yes; Optocoupler
unshielded, max. Encoder Connectable encoders 2-wire sensor — permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indication LED Status indicator digital input (green) Status indicator digital output (green) Potential separation Potential separation digital inputs between the channels between the channels and backplane bus Potential separation digital outputs between the channels between the channels and backplane bus Isolation Isolation tested with connection method required front connector Dimensions	Yes 2 mA No No Yes Yes Yes Yes Yes 8 Yes; Optocoupler 500 V DC
unshielded, max. Encoder Connectable encoders 2-wire sensor — permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indication LED Status indicator digital input (green) Status indicator digital output (green) Potential separation Potential separation digital inputs between the channels between the channels and backplane bus Potential separation digital outputs between the channels between the channels and backplane bus Potential separation digital outputs between the channels between the channels between the channels between the channels between the channels and backplane bus Isolation Isolation tested with connection method required front connector	Yes 2 mA No No No Yes Yes Yes Yes Yes 8 Yes; Optocoupler Yes 8 Yes; Optocoupler

Depth	120 mm
Weights	
Weight, approx.	220 g

last modified:

3/12/2024